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REMARKS

The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

The Personal Interview

Initially, Applicants wish to thank the Examiner for granting and attending the personal interview with Applicants' Representative, Guy Yonay, Reg. No. 52,388 on February 12, 2004. In the interview, claims 1-19 were discussed in view of the cited references.

Status of Claims

Claims 1, 3-8 and 10-21 are pending in the application. Claims 20-21 have been withdrawn. Claims 1, 3-8 and 10-21 have been rejected. Claims 1, 11, 16, 17 and 19 have been amended.

It is respectfully asserted that although the present application is under final rejection, the amendments made herein do not require further search, insofar as the essence of the amendments is present in the dependent claims, and therefore, the subject matter has already been the subject of the Examiner's search. Accordingly, entry of the amendment and consideration of the amended claims are respectfully requested.

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CLAIM REJECTIONS

35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 1, 3, 5, 7, 8, 16, 17 and 19 under 35 U.S.C. § 102, as being anticipated by Nanaumi (US 4,653,495).

It is well established that in order to successfully assert a *prima facie* case of anticipation, the Examiner must provide a single prior art document that includes every element and limitation of the claim or claims being rejected. Therefore, if even one element or limitation is missing from the cited document, the Examiner has not succeeded in making a *prima facie* case.

Nanaumi discloses a laser medical apparatus comprising a plurality of square optical fibers 19 whose output sections are securely held together in a hand piece 21 (see column 5 lines 36-43 and Figs. 6, 8 and 9). The fibers disclosed by Nanaumi, as any optical fiber, must include a cladding layer to protect the fiber and in order to internally reflect the light transmitted therein. Therefore, the image projected from the end-face of such fiber must, by definition, be narrower than the outer diameter of the fiber (including the cladding). Accordingly, when juxtaposing several fibers in the manner disclosed by Nanaumi (see, e.g., Nanaumi Fig. 9) the resulting irradiation pattern on the target plane must, by definition, include gaps caused by the spaces created by the cladding and therefore the irradiation cannot be uniform throughout the target plane. This feature, for example, is reflected in the claims of Nanaumi, which recite "spaced apart projections" into which the plurality of fibers are placed.

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The Examiner noted that Nanaumi discloses a method of delivering laser energy to tissue "such that the output image from the exit-face of the lightguide uniformly irradiates the tissue" (see pages 2 and 5-6 of the Final Office Action). The Examiner further noted that Nanaumi teaches "scanning the image projected from the apparatus to treat a large tissue regions by changing the apparatus' position relative to the tissue region" (see page 6 of the Final Office Action). In light of Nanaumi's use of a plurality of square optical fibers, as described above, and the resulting gaps, the only manner through which Nanaumi can offer a uniform irradiation pattern is by manually changing the position of the apparatus relative to the tissue region being irradiated. In fact, it is due to these gaps that the device disclosed by Nanaumi requires manually changing the position of the device in order to treat the surface (See, e.g., col. 7 lines 1-10).

Applicants respectfully state that the claims are sufficiently distinct from the prior art; however, in an attempt to clarify the claims, Applicants have amended independent claims 1, 11, 16, 17 and 19. Applicants respectfully assert that Nanaumi fails to teach or suggest, either expressly or inherently, at least the following elements:

In amended claim 1, "scanning said projected image while maintaining said lightguide stationary relative to said tissue, so as to treat a continuous region of the tissue, said region having an area greater than the area of said treatment-spot";

In amended claim 11, "during step (c) moving said treatment-spot over said region of tissue while maintaining said optical system stationary relative to said region of tissue, such that said region of tissue is entirely irradiated with an about uniform intensity distribution of said radiation";

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In amended claim 16, "scanning said beam while maintaining said lightguide stationary relative to said tissue, so as to treat a continuous region of the tissue, said region having an area greater than the area of said treatment-spot";

In amended claim 17, "during step (c) continuously moving said treatment-spot while maintaining said lightguide stationary relative to said tissue, such that the region of tissue is about uniformly irradiated by the radiation delivered thereto"; and

In amended claim 19, "during step (c) delivering said sequence of spots in a pattern while maintaining said lightguide stationary relative to said tissue, such that the region of tissue is substantially uniformly irradiated by the delivered radiation".

Accordingly, Applicants respectfully assert that independent claims 1, 11, 16, 17 and 19 are allowable. Claims 3-8, 10, 12-15 and 18 depend, directly or indirectly, from claims 1, 11, 16, 17 and 19 and therefore include all the limitations of these claim. Therefore, Applicants respectfully assert that claims 3-8, 10, 12-15 and 18 are likewise allowable. Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. §102 to independent claims 1, 11, 16, 17 and 19 as being anticipated over Nanaumi and to claims 3-8, 10, 12-15 and 18, which depend therefrom.

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 4, 6, 10-12, 14, 15 and 18 under 35 U.S.C. § 103, as being unpatentable over Nanaumi (US 4,653,495) in view of Buys et al. (US 5,336,217). The Examiner further rejected claim 13 under 35 U.S.C. § 103, as being

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unpatentable over Nanaumi (US 4,653,495) in view of Buys et al. (US 5,336,217) and further in view of Trost (US 5,743,902).

It is well established that in order to successfully assert a *prima facie* case of obviousness, the Examiner must provide a prior art reference (or references when combined) that either teaches or suggests all the elements or limitations of the claim or claims being rejected (see MPEP § 2142). Therefore, if even one element or limitation is missing from the cited reference (or references when combined), the Examiner has not succeeded in making a *prima facie* case. It is further established that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (see MPEP § 2143.01).

As discussed above, Nanaumi fails to teach or suggest, either expressly or inherently, all elements of the pending independent claims 1, 11, 16, 17, and 19. Furthermore, Applicants respectfully assert that neither Buys nor Trost teach or suggest the above elements lacking in the Nanaumi reference. Applicants further respectfully assert that the combination of Nanaumi, Buys and Trost fails to teach or suggest, either expressly or inherently, these elements.

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Applicants respectfully assert that in light of the structure of the apparatus disclosed by Nanaumi, there is no motivation to modify it or combine it with the teachings of either Buys or Trost.

The Examiner cited Buys and Trost as references that disclose "plurality of lenses and moving the treatment spot via relative movement between the exit face of the lightguide and at least one lens" (Buys) and "the use of galvanometer mirror arrangements to move treatment spots in tissue irradiation apparatus" (Trost). However, the movement of the treatment spot according to Nanaumi is effected by the scanning unit 13 (see column 5 lines 24-35 and Fig. 6), which obviates the need for any lens or mirror system. That is, Nanaumi on the one hand, and Buys and Trost on the other hand, present alternative solutions to each other, not complementary ones. Therefore, the combination of the references would result in a nonsensical and inoperative device. Only with impermissible hindsight could the elements of the pending claims be reconstructed therefrom.

In addition, Buys specifically teaches away from the disclosure of Nanaumi's polygonal cross-section fibers. Buys states that "these are technically impossible to produce by means of flexible optical fiber manufacturing processes known to date" (column 4 lines 31-33). Buys further notes that "Such a procedure increases the difficulty of repositioning the hand-piece at a subsequent stage and, moreover, leads to contamination of the ends of the optical fibers. As a result of all these major drawbacks, no apparatus according to [Nanaumi] is yet on the market or in service in medical circles." (column 4 lines 39-45).

With respect to the implausibility of combining Buys and Nanaumi, Buys notes that the disclosure "represents substantial progress by comparison with the manual method or

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with the systematized process devised, such as that of NANAUMI, described in U.S. Pat. No. 4,653,495. This progress is inherent in the process developed by the inventors, as in the structure of the apparatus developed, which did not exist hitherto.” (column 6 lines 64-66).

Thus, Buys expressly denies any possible merit in the apparatus disclosed by Nanaumi, and in particular the polygonal cross-section fibers. Therefore, Applicants respectfully assert that one of ordinary skill in the art aware of both Nanaumi and Buys would not have considered it obvious to combine elements from the references.

Accordingly, Applicants respectfully assert that independent claims 1, 11 and 17 are allowable. Claims 4, 6, 10, 12, 13, 14, 15 and 18 depend from, directly or indirectly, claims 1, 11 and 17 and therefore include all the limitations of these claims. Therefore, Applicants respectfully assert that claims 4, 6, 10, 12, 13, 14, 15 and 18 are likewise allowable. Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. §103 to independent claims 1, 11 and 17 as being obvious over Nanaumi, Buys and Trost and to claims 4, 6, 10-12, 13, 14, 15 and 18, which depend therefrom.

VOLUNTARY CLAIM AMENDMENTS

In addition to the foregoing, claims 1, 16 and 19 have been voluntarily amended in order to correct typographical and editorial errors. These amendments do not narrow the scope of the claims, nor are they being made for reasons of patentability. The amended claims are not subject to the complete bar against the use of the Doctrine of Equivalents as outlined in *Festo Corporation v. Shoketsu Kinsoku Kogyo Kapushiki Co., Ltd. a/ka/ SMC Corporation and SMt Pneumatics, Inc.*.

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Explanations for these voluntary amendments are provided below.

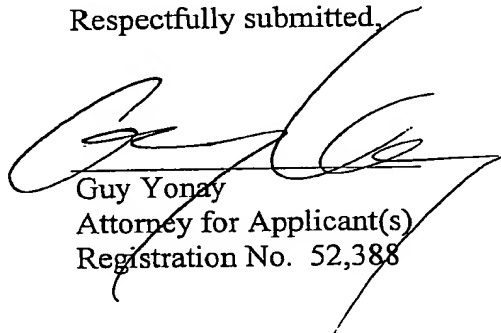
In claims 1 and 16 the term "continuos" has been replaced with the term "continuous".

In claim 19, the term "thereof" has been deleted.

In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel. Please charge any fees associated with this paper to deposit account No. 05-0649.

Respectfully submitted,



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